

This listing of claims will replace all prior versions of claims in the application.

Claims 1-10. (cancelled).

Claim. 11. (new) A method for providing a photoresist relief image, comprising:

- (a) applying a coating layer of a photoresist composition onto a substrate, the photoresist composition comprising a silsesquioxane resin that comprises hexafluoropropylalcohol groups and photoacid-labile groups;
- (b) exposing the photoresist composition to patterned activating radiation having a wavelength of 193 nm;
- (c) developing the exposed photoresist layer to provide a photoresist relief image;

wherein the exposing of the photoresist does not result in a detectable output of Si species at a concentration of 1×10^{13} molecules/cm² or greater.

Claim 12. (new) The method of claim 11 wherein the photoresist composition is coated over an organic polymer layer.

Claim 13. (new) The method of claim 11 wherein the resin is at least substantially free of aromatic groups.

Claim 14. (new) The method of claim 11 wherein the resin is completely free of aromatic groups.

Claim 15. (new) The method of claim 11 further comprising thermally treating the applied photoresist composition layer and then thermally treated photoresist layer is exposed.

Claim 16. (new) The method of claim 15 wherein after exposure the photoresist composition layer is thermally treated and then developed.